

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES**

Application No. : 10/621,152  
Applicant : Alfred Thomas  
Filed : July 15, 2003  
Title : Method And Apparatus For Changing An Appearance Of  
Mechanical Devices Displayed On A Gaming Machine  
TC/A.U. : 3714  
Examiner : Frank M. Leiva  
Docket No. : 247079-00219USPT  
Customer No. : 70243

MS Appeals  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**APPEAL BRIEF PURSUANT TO 37 C.F.R. § 41.37**

Dear Commissioner:

This Appeal Brief is filed pursuant to the Appellants' appeal to the Board of Patent Appeals and Interferences ("Board") from the rejection of claims 1, 3-7, 11-23, 25-26, and 30 in the September 16, 2009 Final Office Action. (Exhibit B). Since the claims have previously been twice objected, this Appeal is proper under 37 C.F.R. 41.31(a). A Notice of Appeal was filed on December 16, 2009. The due date for this Appeal Brief is two months from the mailing date of the Notice of Appeal and this brief is being timely filed. A previous Appeal Brief was filed with appropriate fee and therefore Applicant does not believe any fee is due for this appeal as such fees may be applied to this appeal.

**I. REAL PARTY IN INTEREST**

The real party in interest of the above-captioned patent application is the Assignee, WMS Gaming, Inc.

## **II. RELATED APPEALS AND INTERFERENCES**

There are no other appeals or interferences known to Appellant that will have a bearing on the Board's decision in an appeal of this matter.

## **III. STATUS OF THE CLAIMS**

Claims 1, 3-7, 11-23, 25-26, and 30 stand twice-rejected and their rejection is the subject of the appeal of this matter. Claims 2, 8-10, 24, 27-29 and 31 were previously canceled.

## **IV. STATUS OF AMENDMENTS**

No amendments have been made subsequent to the Amendment and Response to Office Action mailed April 4, 2008.

## **V. SUMMARY OF CLAIMED SUBJECT MATTER**

Claims 1, 3-7, 11-23, 25-26, and 30 include, but are not limited to, methods and systems to change the appearance of mechanical reels in order to notify a player of a shift to a bonus game with a different mathematical model using the same device as demonstrated in the embodiments shown in Figs. 1-15 of the specification.

Claim 1 generally relates to a method for changing an appearance of a plurality of mechanical reels 62 displayed on a gaming machine 10. *See* ¶ 18, Figs. 1 and 4, U.S. Publication No. 2005/0014548<sup>1</sup> (Exhibit A), Specification, ¶ 17, p. 7, l. 21 to p. 8, l. 5. A wager is received to play a base wagering game that utilizes the mechanical reels 62. (Ex. A, ¶¶ 21, 25, Specification, ¶¶ 20, 24, p. 9, ll. 3-9, p. 10, l. 21 to p. 11, l. 6, Fig. 1). The base wagering game

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<sup>1</sup> The Publication for the application at issue is being attached for convenience as Exhibit A. Applicant is also providing the corresponding specification page and line number in this and following sections.

has a first mathematical model of player odds. (Ex. A, ¶ 46, Spec., ¶ 45, p. 22, ll. 9-17). The outcomes of the player odds are displayable on the mechanical reels 62. (Ex. A, ¶¶ 25, 43, Spec., ¶¶ 24, 42, p. 10, l. 21 to p. 11, l. 3, p. 21, ll. 1-4). An indication to play a special feature game that utilizes the mechanical reels 62 is detected. (Ex. A, ¶ 45, Spec., ¶ 44, p. 21, ll. 12-18). The special feature game has a second mathematical model of player odds. (Ex. A, ¶ 46, Spec., ¶ 45, p. 22, ll. 14-16). The second mathematical model is different from the first mathematical model. (Ex. A, ¶ 46, Spec., ¶ 45, p. 22, ll. 14-16). In response to detecting the indication, an appearance of the mechanical reels 62 is changed prior to playing the special feature game to provide visual notification to a player that the special feature game is underway rather than the base wagering game. (Ex. A, ¶¶ 39-40, Spec., ¶¶ 38-39, p. 18, ll. 9-22). The changed appearance of the mechanical reels is maintained while the special feature game is played. (Ex. A, ¶ 47, Spec., ¶ 46, p. 22, ll. 20-21).

Claim 13 generally relates to a method for changing an appearance of a plurality of mechanical reels 62 on a gaming machine 10. (Ex. A, ¶ 18, Figs. 1 and 4, Specification, ¶ 17, p. 7, l. 21 to p. 8, l. 5). A wager is received to play a slot game that utilizes the plurality of mechanical reels 62. (Ex. A, ¶¶ 21, 25, Specification, ¶¶ 20, 24, p. 9, ll. 3-9, p. 10, l. 21 to p. 11, l. 6, Fig. 1). The slot game has a first mathematical model of player odds. (Ex. A, ¶ 46, Spec., ¶ 45, p. 22, ll. 9-17). The outcomes of the player odds are displayable on the mechanical reels 62. (Ex. A, ¶¶ 25, 43, Spec., ¶¶ 24, 42, p. 10, l. 21 to p. 11, l. 3, p. 21, ll. 1-4). A first indication to play a bonus game that utilizes the plurality of mechanical reels 62 is detected. (Ex. A, ¶ 45, Spec., ¶ 44, p. 21, ll. 12-18). The bonus game has a second mathematical model of player odds. (Ex. A, ¶ 46, Spec., ¶ 45, p. 22, ll. 14-16). The outcomes of the player odds are displayable on the mechanical reels 62 and the second mathematical model is different from the first

mathematical model. (Ex. A, ¶ 46, Spec., ¶ 45, p. 22, ll. 14-16). In response to detecting the first indication, a color of the plurality of mechanical spinning reels 62 is changed prior to playing the bonus game. (Ex. A, ¶¶ 39-40, Spec., ¶¶ 38-39, p. 18, ll. 9-22). The color of the reels 62 is maintained during the playing of the bonus game. (Ex. A, ¶ 47, Spec., ¶ 46, p. 22, ll. 20-21). A second indication is detected to terminate the play of the bonus game. (Ex. A, ¶ 48, Spec., ¶ 47, p. 23, ll. 7-9). In response to detecting the second indication, the color to the plurality of mechanical spinning reels 62 is restored. (Ex. A, ¶ 48, Spec., ¶ 47, p. 23, ll. 10-21).

Claim 20 generally relates to a gaming machine 10 including a value input device (20, 22). (Ex. A, ¶ 21, Spec., ¶ 20, p. 9, ll. 3-9, Fig. 1). The gaming machine 10 includes a displayed plurality of mechanical reels 62 operable during both a base game having a first mathematical model of player odds and a special feature game. (Ex. A, ¶¶ 21, 25, 46, Specification, ¶¶ 20, 24, 45, p. 9, ll. 3-9, p. 10, l. 21 to p. 11, l. 3, p. 22, ll. 9-17). The outcomes of the player odds are displayable on the mechanical reels 62. (Ex. A, ¶¶ 25, 43, Spec., ¶¶ 24, 42, p. 10, l. 21 to p. 11, l. 3, l. 21, ll. 1-4). A special feature game has a second mathematical model of player odds. (Ex. A, ¶ 46, Spec., ¶ 45, p. 22, ll. 14-16). The second mathematical model is different from the first mathematical model. (Ex. A, ¶ 46, Spec., ¶ 45, p. 22, ll. 14-16). An illumination source 60 is adapted to illuminate the displayed mechanical reels 62. (Ex. A, ¶ 27, Spec., ¶ 26, p. 11, l. 19 to p. 12, l. 14, Fig. 4). A controller 200 is operatively coupled to the value input device (20, 22), the displayed mechanical reels 62 and the illumination source 60. (Ex. A, ¶ 36, Spec., p. ¶ 35, p. 17, ll. 8-17, Fig. 5). The controller 200 includes a processor 204 and a memory (202, 206) coupled to the processor 204. (Ex. A, ¶ 34, Spec., ¶ 33, p. 16, l. 17 to p. 17, l. 5, Fig. 5). The controller 200 is programmed to allow a player to make a wager to play the base game. (Ex. A, ¶¶ 21, 25, Specification, ¶¶ 20, 24, p. 9, ll. 3-9, p. 10, l. 21 to p. 11, l. 6, Fig. 1). The controller

200 detects a first indication to play the special feature game. (Ex. A, ¶ 45, Spec., ¶ 44, p. 21, ll. 12-18). In response to detecting the first indication, the controller 200 illuminates the illumination source 60 to change an appearance of the displayed mechanical reels 62 prior to playing the special feature game to provide visual notification to a player that the special feature game is underway rather than the base game. (Ex. A, ¶¶ 39-40, Spec., ¶¶ 38-39, p. 18, ll. 9-22). The changed appearance of the mechanical reels 62 is maintained while the special feature game is played. (Ex. A, ¶ 47, Spec., ¶ 46, p. 22, ll. 20-21).

Claim 30 generally relates to a method for changing an appearance of a plurality of mechanical reels 62 displayed on a gaming machine 10. (Ex. A, ¶ 18, Spec. ¶ 17, p. 7, l. 21 to p. 8, l. 5, Figs. 1 and 4). A wager is received to play a base game having a first mathematical model of player odds. (Ex. A, ¶¶ 21, 25 and 46, Spec., ¶¶ 20, 24 and 45, p. 9, ll. 3-9, p. 10, l. 21 to p. 11, l. 6, p. 22, ll. 8-17, Fig. 1). The outcomes of the player odds are displayable on the mechanical reels 62. (Ex. A, ¶¶ 25, 43, Spec., ¶¶ 24, 42, p. 10, l. 21 to p. 11, l. 3, p. 21, ll. 1-4). A base game outcome is displayed with the mechanical reels 62. (Ex. A, ¶ 44, Spec., ¶ 43, p. 21, ll. 5-9). An indication to play a special feature game having a second mathematical model of player odds is detected. (Ex. A, ¶ 45, Spec., ¶ 44, p. 21, ll. 12-18). The outcomes of the player odds are displayable on the mechanical reels and the second mathematical model is different from the first mathematical model. (Ex. A, ¶ 46, Spec., ¶ 45, p. 22, ll. 14-16). In response to detecting the indication, an appearance of the mechanical reels 62 is changed prior to playing the special feature game. (Ex. A, ¶¶ 39-40, Spec., ¶¶ 38-39, p. 18, ll. 9-22). The changed appearance of the mechanical reels 62 is maintained while the special feature game is played. (Ex. A, ¶ 47, Spec., ¶ 46, p. 22, ll. 20-21). A special feature game outcome is displayed with the mechanical reels 62. (Ex. A, ¶ 47, Spec., ¶ 46, p. 22, ll. 20-21).

## **VI. GROUNDS FOR REJECTION TO BE REVIEWED ON APPEAL**

I. Whether claims 1, 3-6, 11-15, 18-20, 22-23, 25-26 and 30 were improperly rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Publication No. 2005/0014548 (Exhibit C, “Sato”) in view of U.S. Patent No. 5,722,891 (Exhibit D, “Inoue”) and U.S. Publication No. 2003/0022713 (Exhibit E, “Jasper”).

II. Whether claims 16 and 21 were improperly rejected under 35 U.S.C. 103(a) as being unpatentable over Sato, Inoue and Jasper in view of the Official Notice of the Final Office Action.

III. Whether claims 7 and 17 were improperly rejected under 35 U.S.C. 103(a) as being unpatentable over Sato, Inoue and Jasper in view of U.S. Patent No. 6,702,675 (Exhibit F, “Poole”).

The Final Office Action rejected Claims 1, 3-6, 11-15, 18-20, 22-23, 25-26 and 30 under 35 U.S.C. 103(a) as being unpatentable over Sato in view of Inoue and further in view of Jasper. For independent claims 1 and 30, the Final Office Action asserts that Sato discloses a method for changing an appearance of a plurality of mechanical reels. (Ex. B, p. 3). The Final Office Action asserts that Sato inherently discloses detecting an indication to play a special feature game since Sato discloses changes the color of the reels in response to change to a bonus game. (Ex. B, p. 4). The Final Office Action concedes that Sato is silent as to the change of appearance being maintained during the bonus game. (Ex. B, p. 4). The Final Office Action asserted that it would be obvious to modify Sato to maintain the color change during the bonus game as shown by Inoue. (Ex. B, p. 4). The Final Office Action also concedes that Sato does not disclose having different odds for the base game and the special feature but could be combined with Inoue. (Ex B, p. 4). The Final Office Action asserted that it would be obvious to

modify Satoh by having different mathematical models as in Jasper to increase player retention on the game. (Ex. B, pp. 4-5).

With regard to independent claims 13 and 20, the Final Office Action asserts that Satoh discloses the above noted elements including receiving a wager, detecting a first indication to play a bonus game, and changing the color of the mechanical reels. (Ex. B, p. 6). The Final Office Action asserts it would be obvious from Satoh to transition back to the basic game by changing back the colors based on the previous transition to the bonus game. (Ex. B, pp. 6-7).

## **VII. ARGUMENT**

For the Board's convenience, claims 1, 3-7, 11-23, 25-26, and 30 are one group that will stand or fall together. As will be explained, the Final Office Action fails to meet the burden to establish that the combination of Satoh, Inoue and Jasper disclose all of the elements of the independent claims 1, 13, 20 and 30.

### **A Claims 1, 3-6, 11-15, 18-20, 22-23, 25-26 and 30 Were Improperly Rejected Under 35 U.S.C. 103(a) As Unpatentable Over Satoh In View Of Inoue and Jasper**

#### **1. The Claims Solve Different Problems Inherent In The Gaming Mechanisms Of Inoue, Jasper And Satoh**

Claims 1, 13, 20 and 30 require that the base wagering game has a first mathematical model of player odds and the special feature game has a second, different mathematical model of player odds. The different mathematical player odds give game designers the flexibility in offering a different bonus game to the player but meet the requirement of notification to the player that a second, different, game is being played. The claims also require that the outcomes of the player odds from the two mathematical models are displayable on the mechanical reels. The mechanical reels are used for both the base wagering game and the special feature game and

require the same player action (activating the reels) for both games. The ability to reuse the mechanisms for both the base wagering game and the bonus game allow for simplification of the machine and cost savings because only one game mechanism need be manufactured. The appearance of the mechanical reels is changed to provide visual notification to a player that the special feature game having the second, different mathematical model of player odds is underway. The appearance of the mechanical reels is maintained while the special feature game is played.

The Final Office Action acknowledges that Satoh does not disclose the change of appearance is maintained during the bonus round or game. (Ex. B, p. 4). The Final Office Action also acknowledges that Satoh does not disclose “having different odds for the base game and bonus game.” The Final Office Action has attempted to fill in these elements with Inoue and Jasper. However, the combination of these references with Satoh would not either anticipate the elements of the claims or be improper as they would impermissibly change the fundamental operation of Satoh.

**a. The Importance Of One Common Mechanism and The Shortcomings of Inoue**

Inoue discloses a set of normal reels 5a-5c and a set of bonus reels 6a-6c as shown in Fig. 1. (Ex. D). A window frame 2a includes light emitting diodes that visually indicate the normal reels 5a-5c during the play of the normal game. (Ex. D, Col. 3, ll. 32-41). When the bonus game is played with reels 6a-6c, indicator LEDs in a second window frame 3a illuminate the bonus reels to be more conspicuous than that of a normal game. (Ex. D, Col. 3, ll. 41-48). Inoue does not disclose changing the lighting for the base game as Inoue only discloses illuminating the bonus reels 6a-6c via an indicator in the window frame 3a when the bonus game is activated as explained in Col. 3, ll. 35-45. (Ex. D). The lighting in the normal reels 5a-5c presumably



remains the same as only the lighting for the bonus reels is changed to indicate the play of the bonus game. (Ex. D, Col. 5, ll. 32-35).

Inoue suffers from the same problems as conventional bonus games, namely the need for a second set of slot and reel mechanisms for the bonus game. The appearance of the second set of reels as the bonus game mechanism alone is different. The lighting effects for the second set of reels only serve to highlight this existing different mechanism dedicated specifically for the bonus game. Further, the appearance of the first set of reels remains the same during the bonus game such that Inoue actually teaches away from the element of maintaining the change in the appearance of reels used in the base game for the bonus game.

Using the same mechanism for the base wagering game as a bonus game achieves the advantage of saving the need to add additional parts for a different bonus game mechanism such as the extra reels in Inoue. Gaming regulations require that a player is notified of a change between the base game and a special feature game. In prior art such as Inoue, such a notification was satisfied because the mechanisms for the bonus game are separated from those of the base game. The game play of the bonus mechanisms could be highlighted by lighting but such lighting was not used for informational purposes. However, the use of one mechanism such as reels for the base game and a second mechanism device such as a second set of reels for the special feature game increase the expense of manufacturing a gaming machine. The use of the same mechanism requires meeting stringent regulatory requirements to notify a player of not only a shift to a bonus game but also that the game has a different mathematical model. The present claims provide a visual differentiation between base game play and special feature game play therefore allowing the use of the same mechanical device for both games. The use of the same mechanical devices such as reels for both the base game and the special feature game,

while notifying the player of the transitions between the games, results in more cost effective use of a single set of mechanical game components. This advantage cannot be realized by Inoue.

**b. Jasper Does Not Disclose Using The Same Reels and Therefore The Excitement To The Player Is Less For A Bonus Game**

Similarly, Jasper discloses a different type of game where a player is presented with a first set of odds to spin all of the slot machine's reels as shown in Fig. 1. (Ex. E, ¶ 7). A player may win the current game and be given a chance to play the bonus game "by spinning at one or more of the reels but not all of the reel slot machine's reels according to a second set of odds of winning." (Ex. E, ¶ 7). (Ex. E, see also ¶¶ 30, 35, 42 and 43). The bonus game is actually not an independent game as a player essentially risks their entire award from the current game on the outcome of the bonus game. (Ex. E, ¶ 17). Thus, unlike the present claims which use the same slot mechanisms for the basic as well as the bonus game, Jasper uses different reels in order to provide the different mathematical model for the bonus game. (Ex. E, ¶ 17 "but not all of the reel slot machine's reels" are used for the bonus, *see also* ¶ 30 a player "then spins a second subset of the set of reels ... to play the bonus game"; ¶ 43 a "second subset of reels selected from the set of reels" for the bonus game). The set of different odds is produced by using less than the number of reels in the basic game in Jasper. Jasper therefore suffers from the same problems as Inoue, namely that an extra reel mechanism is needed to activate the bonus game. Moreover, Jasper does not disclose any mechanism for differentiating between the base game and the bonus game and therefore would not pass regulatory muster.

The Office Action has asserted that Jasper discloses a base wagering game with a first set of odds and a special feature game with a second set of odds. However, Jasper sacrifices the full range of a bonus game that uses all of the reels of the base game for a truncated bonus game that

uses less than all of the reels of the base game. This mechanism does change the odds, but it sacrifices playability of the bonus game because it does not take full advantage of using all of the reels available in the base game.

**c. The Desirability of Two Mathematical Models And The Shortcomings Of Satoh**

Satoh does not disclose nor teach changing the appearance of mechanical reels to indicate the play of a bonus special feature game with different mathematical odds than the base game. Therefore, any additional game played on the reels in Satoh are played with the same mathematical model as the basic game even if the appearance of the reels is changed. Special feature games are generally attractive to a player as an incentive to play the basic game because the special feature game provides a greater chance of winning than the base game as a result of a different mathematical model than the base game. The different mathematical model therefore adds to the excitement of the bonus game which is something lacking in Satoh.

**2. The Combination of Inoue with Satoh Is Improper Because Inoue Teaches Away From The Single Set Of Reels In Satoh And Changing the Appearance of The Base Reels.**

The Office Action has cited the combination of Satoh and Inoue as disclosing the maintaining the changed appearance during the bonus game. (Ex. B, p. 4). However, the claims require that the reels used for the base game maintain the changed appearance. Inoue therefore teaches away from the claim elements because the base reels in Inoue do not change during the bonus game. Further, the combination of Inoue and Satoh/Jasper would not be proper because such a combination would require a second set of reels for a bonus game as disclosed in Inoue. Because Inoue fundamentally teaches away from use of a single set of reels, the combination of

Inoue with Satoh and Jasper would result in two sets of reels and therefore not anticipate the claim elements.

### **3. The Combination of Jasper With Inoue Would Destroy Satoh For Its Intended Purpose**

Jasper has been combined with Satoh for the proposition of having different mathematical models for the bonus and base games. This changes the fundamental operation of Satoh and therefore is evidence that it would not be proper to combine Satoh and Jasper. MPEP 2143.01(VI). This combination changes the operation of Satoh/Inoue because Satoh relies on the change in lighting to enhance the stage effects on all of reels to maintain the overall appearance of the game during the bonus game that maintains the same mathematical model due to same number of reels as the normal game. (Ex. C, ¶ 54). In contrast, the change in mathematical models in Jasper occurs because only a subset of the reels in the basic game is activated in the bonus game. (Ex. E, ¶¶ 7, 17, 30, and 43). The change in mathematical models therefore occurs in Jasper because the base condition of the game is changed for the bonus phase with the selection of the subset of reels. The fundamental operation of Satoh (and also Inoue) depends on the operation of all of the reels for both the normal or base game and the bonus game. (Ex. C, ¶ 54). Therefore the operation of Satoh relies on use of all the reels in both the basic and bonus game where Jasper relies on using only a subset of the base game reels to change mathematical models. Even if various elements of the claims may be found in the references, MPEP 2143.01(VI) states that a combination would be improper where, as here, the fundamental operation of the base reference, Satoh, is prevented by the combination of the references. Because the combination of Jasper with Satoh is improper, the claims are allowable over this combination.

**4. The Combination of Jasper with Inoue and Satoh Does Not Disclose Using All Of The Same Mechanical Reels For The Bonus And Base Games**

Even if the combination of Jasper, Inoue and Satoh were made, the combination would either have two reel sets as disclosed by Inoue or use a subset of the basic game reels as disclosed by Jasper. The two reel sets do not anticipate the present claims because they require the same set of reels for both the base wagering game and the bonus game. If the mechanism disclosed by Jasper were combined with Satoh, a subset of the base game reels would be used in order to provide the different mathematical odds for the bonus game. However, this combination would also not anticipate the claims because not every base game reel would be used for the bonus game. The combination of Jasper, Inoue and Satoh therefore would not anticipate the elements of the claims. The claims at issue all require using all of the same mechanical reels for both the basic game and the bonus game.

**B. Claims 16 and 21 Were Improperly Rejected Under 35 U.S.C. 103(a) As Being Unpatentable Over Satoh, Inoue and Jasper In View Of The Official Notice Of The Final Office Action**

Claims 16 and 21 are allowable for the same reason that the base independent claims 13 and 20 are allowable as explained in the previous section.

**C. Claims 7 and 17 Were Improperly Rejected Under 35 U.S.C. 103(a) As Being Unpatentable Over Satoh, Inoue And Jasper In View Of Poole**

Claims 7 and 17 are allowable for the same reason that the base independent claim 13 is allowable as explained in the previous section.

#### **VIII. CLAIMS APPENDIX**

A clean copy of the claims 1, 3-7, 11-23, 25-26, and 30 involved in the appeal is included in the Claims Appendix.

#### **IX. EVIDENCE APPENDIX**

A copy of the evidence relied upon by the appellant is included in the Evidence Appendix and is herein referenced. A list of evidence and where each was entered in the record is included in the Index to the Appendices.

#### **X. RELATED PROCEEDINGS APPENDIX**

As there are no related proceedings, no information is provided in the Related Proceedings Appendix.

#### **XI. CONCLUSION**

For at least the foregoing reasons, the final rejection of appealed claims 1, 3-7, 11-23, 25-26, and 30 set forth in the Final Office Action mailed August 28, 2008, should be reversed.

Respectfully submitted,

Date: February 16, 2010

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